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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,987	01/30/2001	Kon-Hee Lee	1081.39545X00	8457

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[REDACTED] EXAMINER

NGUYEN, LEE

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2682

DATE MAILED: 07/28/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/771,987	LEE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	LEE NGUYEN	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 2 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1 and 2 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ .	6) <input type="checkbox"/> Other: ____ .

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the claim recites “demodulating” the combined signal while performing in the transmit modulating portion. It is unclear if “modulating” is used instead. The claim further recites “etc.”. It is unclear to what this term refers.

In this office action, the examiner applies the art rejection with his best understanding.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henke et al. (US 4,484,355) in view of Vignali et al. (US 5,327,580).

Regarding claim 1, Henke teaches a wireless communication system wireless communication methods and system for automatically setting a frequency channel and a tone squelch (fig. 1), comprising: an amplifier 16 for amplifying a necessary band frequency from a receive information signal induced by an antenna 12 passing a switch 14; a mixer 20 for mixing the band frequency with a phase synchronizing signal from a local oscillator portion 18; a demodulating portion 22 for demodulating a signal from the

mixer and supplying the demodulated signal to a speaker 28; a receive tone squelch circuit 38 for separating a sound signal from the demodulated signal; a transmit modulating portion 18 (col. 5, line 62) for combining a transmit signal input 30 with a transmit tone squelch frequency from a transmit tone squelch circuit 24 and modulating the combined signal (col. 5, lines 56-65); a controller 52 for converting a code previously inputted into a code inputting portion into a frequency and tone squelch code (col. 13, line 25 through col. 15, line 1); a memory 54 for storing data, which is coded corresponding to frequency channel data and tone squelch code selected by the controller, at a predetermined address region (col. 15, lines 26-50 and col. 2, lines 43-65). Henke only differs from the claimed invention in that a filter is used for receiving only desired frequency band and a display for displaying the frequency set by the controller. It is taken official notice that the art providing a filter for receiving desire frequency band and a display for display frequency is conventionally well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the filter and the display to the system of Henke in order to filtering unnecessary frequency band and to inform the frequency selected to the user. Henke as modified also fails to teach using duplexer rather a

switch at the antenna between the transmitter and receiver. According to Vignal, full duplex or half duplex can be used to transmit and receive signals at different frequency (col. 2, line 59 through col. 3, line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide duplex of Vignal to the system of Henke in order to enhance communication capability compared to the simplex mode.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Henke et al. (US 4,484,355).

Regarding claim 2, Henke teaches a wireless communication method for automatically setting a frequency channel and tone squelch comprising the steps of: storing a frequency channel code and a modulating frequency converting code at a memory, previously (col. 2, lines 56-58); inputting data

at a waiting mode of a system corresponding to the frequency channel code and modulating frequency converting code (col. 2, lines 61-63); converting into a transmit mode after the completion of the data input (col. 2, lines 63-68); setting a frequency channel according to the frequency channel code after the completion of the transmit mode convert step (col. 2, lines 63-68); and transmitting information according to the modulating frequency convert code after the completion of the frequency channel setting (col. 9, lines 63-68).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE NGUYEN whose telephone number is (703)-308-5249. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on (703) 308-6739. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

*Lee Nguyen* 7/24/03  
LEE NGUYEN  
Primary Examiner  
Art Unit 2682